

## Blood Agar, Chocolate Agar, and *Mycobacterium tuberculosis*

We have read with interest the recent paper by Drancourt et al. in which they reviewed the use of blood agar medium for the primary isolation of *Mycobacterium tuberculosis* (2). They state that to their knowledge "no comparative study comparing the efficacy of blood-based agars and egg-based agars has been carried out, and even the ability of blood agar to support growth of *M. tuberculosis* was forgotten." In December 2000, we published a letter (PubMed PMID: 11198009) concerning the isolation of *M. tuberculosis* on both blood and chocolate agar media from a synovial fluid sample following prolonged incubation (5). In recent years, we have been routinely recovering *M. tuberculosis* in our laboratory from blood samples that have been cultured initially in liquid media and then subcultured onto chocolate agar and from skin biopsy samples directly cultured on to chocolate agar.

The use of blood agar media for the recovery of *M. tuberculosis* was reported early in the last century but has been removed from contemporary microbiology manuals (4, 6). However, there have been more recent reports, including one from 1998 in which Arvand et al. isolated *M. tuberculosis* from a lymph node when investigating a diagnosis of cat scratch disease (1). Even earlier, a comparative study of different media conducted in 1977 suggested that penicillin blood agar would be at least as good as, if not better than, Löwenstein-Jensen medium for recovering *M. tuberculosis* (3).

The study of Drancourt et al. with clinical samples is very useful in once again highlighting the ability of these media to grow *M. tuberculosis*, in particular when this is not the organism being sought. Moreover, we agree with Drancourt et al. in highlighting the importance of handling in a secure manner culture media which are not specific for mycobacteria but require prolonged incubation, as we have already stated in our paper. Sealing the agar plates with adhesive tape (Micropore surgical tape; 3M, St. Paul, Minn.) is a simple way to avoid risks.

### REFERENCES

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### Authors' Reply

We agree that anecdotal reports mentioned that *Mycobacterium tuberculosis* was occasionally isolated on blood agar. Our research was limited to English and found only one such reference, as mentioned in our paper. Moreover, our purpose was to demonstrate that this was not a sporadic event but that blood agar can replace egg-based media. This had never been demonstrated before to the best of our knowledge. In our clinical microbiology laboratory, we routinely inoculate 10,000 samples for the diagnosis of tuberculosis every year. Now, we have replaced egg-based media with blood agar. Instead of using plates, we now use tubes, which avoid desiccation. We believe that this is a major change for clinical microbiology laboratories.

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